
Remarks

Pursuant to 37 C.F.R. § 1.115, the Applicants respectfully request entry of the above amendments. No new matter has been added.

The amendments to the specification are to provide clarity and consistency in reference to the cooperating fastener component. Additional amendments to the specification are to correct references to figures. These amendments merely conform the identified text to other portions of the specification.

The amendments to claims 7 and 19 correct missing antecedent basis. The amendment to claim 13 shows corrects its dependency. The amendments to claims 17 and 18 put the claims in a form that better conforms to method claims.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

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Respectfully submitted,

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CERTIFICATE OF EXPRESS MAILING

I, Catherine E. Wolf, hereby certify that on June 7, 2002, this paper or fee is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

By: 

Catherine E. Wolf

Marked-Up Version of Specification Amendments

Amendments made to the paragraph starting on page 3, line 14 are as follows:

The [second] cooperating fastener component can be a loop material such as, for example, a woven, knit and/or nonwoven loop material. As a further example, the nonwoven loop material can be a pattern unbonded material. For example, the nonwoven loop material may be a pattern unbonded material such as, for example, the material described in U.S. Patent Nos. 5,858,515 and/or 5,763,041, the contents of which are incorporated herein by reference.

Amendments made to the paragraph starting on page 4, line 22 are as follows:

With reference to the Figures, an article, such as a sanitary napkin 10 illustrated in FIGS. 1A-E has a lengthwise, longitudinal direction 26, a lateral cross-direction 24, and a longitudinally extending medial line 40. The article includes a first article portion, a second article portion and at least one fastener 36 for securing the first article portion to the second article portion. Such securement can, for example, be configured to thereby hold the article on a wearer. The fastener desirably includes at least one, first fastener component 70 attached to an appointed section of the first (or second) article portion, and a cooperating[, second] fastener component 72 attached to the second (or first) article portion. The first fastener component 70 includes an engagement section having a first plurality of engagement members 56. Each engagement member 56 has a stem portion [58] with a distal end region [44], and has at least one securement element [60] disposed at its corresponding distal end region. The plurality of engagement members has an arrangement pattern of their securement elements. It is contemplated that multiple pluralities of engagement members, each with different arrangement pattern of their securement elements, may be used.

Amendments made to the paragraph starting on page 5, line 3 are as follows:

Another aspect of the invention can provide an article in which the fastener component may include an engagement section having a plurality of non-isotropic engagement members. Each non-isotropic engagement member can have a stem portion [58] with a distal end portion [44], and a direction-dependent securement element [60] which is non-isotropically disposed at the distal end region of its corresponding stem portion [58] to provide a non-isotropic engagement opening. The plurality of non-isotropic engagement members can have an alignment pattern of their engagement openings. It is contemplated that multiple pluralities of non-isotropic engagement members may be used and that different alignment patterns of their engagement openings are possible.

Amendments made to the paragraph starting on page 5, line 26 are as follows:

[FIG. 1 is an illustration] FIGS. 1A-1E are illustrations of an exemplary sanitary napkin with fasteners 36 in the form of wings or flaps. At least one first fastener component 70 is attached to the wing 36 and at least one cooperating fastener component 72 is attached to the opposite wing 36. In some embodiments of the invention, the first fastener component 70 and the cooperating fastener component 72 may be attached to each wing such that the wings may be fastened without concern for overlapping the wings in any particular order. In other yet embodiments, the wing may be formed partially or entirely of the cooperating fastener component 72. [FIG. 1A] FIG. 1C is an illustration of the sanitary napkin with its wings 36 or flaps secured around an undergarment or panty "P". The arrows labeled "A" generally represent the attachment direction. The arrows labeled "O" generally represent the direction that is orthogonal to the attachment direction. It should be understood that this orthogonal direction is thought to be generally or substantially along or in the plane of the article although in some specific cases, it include a minor Z-direction component.

Amendments made to the paragraph starting on page 6, line 24 are as follows:

The following is a brief description of the orientation direction with respect to the lengthwise, longitudinal direction 26 and the lateral cross-wise direction depicted in [FIG. 1] FIGS. 1A, 1D and 1D'. In one exemplary sanitary napkin, the orienting the axis of maximal engagement of the first fastener component in the attachment direction meant orienting the first fastener component so its axis of maximal engagement was in the cross-machine direction or the lateral cross-direction 24 shown in [FIG. 1] FIGS. 1A, 1D and 1D'. Thus, for that sanitary napkin, the orienting the axis of maximal engagement of the first fastener component generally orthogonal to the attachment direction meant orienting the first fastener component so its axis of maximal engagement was in the machine direction or the lengthwise, longitudinal direction 26 shown in [FIG. 1] FIGS. 1A, 1D and 1D'.

Amendments made to the paragraph starting on page 7, line 1 are as follows:

In another aspect of the invention, the fastening system also provides ease of use or application benefits. As shown in [FIGS 10A-C] FIGS. 5A-C, the wings or fasteners 36 may be engaged on the topsheet side "T" or body side of the sanitary napkin or incontinence article 10 while the peel strip "PS" protecting the garment adhesive (not shown) is removed. The article may then be placed in position on an undergarment "P" and then the wings may be engaged.

Amendments made to the paragraph starting on page 7, line 7 are as follows:

The present invention also encompasses a sanitary napkin or incontinence pad that has an attachment system having wings that are adapted to hold, secure, attach or join the sanitary napkin or incontinence pad to an undergarment as well as a fastener component including a plurality of engagement members that are adapted to engage the fabric of an undergarment to also help hold, secure, attach or join the sanitary napkin or incontinence pad to the undergarment. In particular, [FIG. 11] FIG. 5A shows such a system in which the fasteners or wings 36 that may be formed of the cooperating fastener component 72 are engaged by contact with the first fastener component 70. A strip of garment adhesive ["GA"] (not shown) on the backsheet side or garment side of the article 10 can help secure the article to the underwear "P". In addition, a first fastener component 70' is in a position to engage the fabric of the underwear "P" while the fasteners or wings 36 secure or join the article to the underwear "P" by wrapping around the underwear.

Amendments made to the paragraph starting on page 9, line 21 are as follows:

A configuration which employs a selectively releasable, interengaging mechanical fastening system can, for example, locate the first fastener component on at least the appointed mating or securing surface of the tab, flap or wing 36, and can locate the cooperating[, second] fastener component on the appointed engagement surface of the appointed tab, flap or wing 36. For example, with the representatively shown hook-and-loop fastener, the fastening component which is attached to the appointed mating or securing surface of a fastener tab 36 may include a hook type of mechanical engagement element, and the complementary fastening component, which is operably joined and attached to the appointed surface of a fastener tab 36 can include a loop type of fastening element.

Amendments made to the paragraph starting on page 12, line 12 are as follows:

In the various configurations of the invention, the engagement force between the selected first fastener component and its appointed and cooperating [second] fastener component should be large enough and durable enough to provide an adequate securement of the article on the wearer during use. In particular arrangements, especially where there are sufficiently high levels of engagement shear force provided by the fastening system, the fastening engagement may provide a peel force value of not less than a minimum of about 40 grams-force (gmf) per inch of the "width" of engagement between the first and [second] cooperating fastener components. In further arrangements, the fastening engagement may provide a peel force value of not less than about 100 gmf/inch to provide improved advantages. In desired configurations, the fastening engagement may provide a peel force value of not less than about 200 gmf per inch of the "width" of engagement between the first and

[second] cooperating fastener components . Alternatively, the peel force is not less than about 300 gmf/inch, and optionally is not less than about 400 gmf/inch to further provide improved benefits. In other aspects, the peel force is not more than about 1,200 gmf/inch. Alternatively, the peel force is not more than about 800 gmf/inch, and optionally is not more than about 600 gmf/inch to provide improved performance.

Amendments made to the paragraph starting on page 12, line 29 are as follows:

The engagement force between the selected first fastener component and its appointed and cooperating [second] fastener component may additionally provide a shear force value of not less than about 400 gmf per square inch of the area of engagement between the first and [second] cooperating fastener components. Alternatively, the shear force is not less than about 1,000 gmf/in², and optionally, is not less than about 1,700 gmf/in². In further aspects, the shear force can be up to about 4,400 gmf/in², or more. Alternatively, the shear force is not more than about 3,900 gmf/in², and optionally is not more than about 3,500 gmf/in² to provide improved performance.

Marked-Up Verion of the Claim Amendments

7. (amended) The system of claim 1, wherein the [fastening] system can be used to secure the article in a configuration convenient for disposal.

13. (amended) The sanitary napkin of [claim 11] claim 12, wherein the nonwoven loop material is a pattern unbonded material.

17. (amended) The method of claim 15, [where] further comprising the step of engaging a first fastener component on at least one wing is engaged with a cooperating fastener component on at least one wing.

18. (amended) The method of claim 15, [wherein] further comprising the step of interengaging a mechanical hook material [is interengaged] with a loop material.

19. (amended) The method of claim 15, further comprising the step of utilizing [the fastening system] selectively releasable interengaging fasteners to secure the article in a configuration convenient for disposal.